

**Amendment to the Claims**

1. (Currently Amended) A nutraceutical for ~~use in the~~ treatment of inflammatory conditions, wherein the nutraceutical comprises ~~comprising~~ docosahexaenoic acid or an ester thereof and at least one carotenoid.
2. (Currently Amended) The nutraceutical according to Claim 1 wherein the ester of docosahexaenoic acid is ~~selected from the group consisting of:~~ a triglyceride, diglyceride, monoglyceride, phospholipids, glycolipid, sphingolipid or sulpholipid.
3. (Currently Amended) The nutraceutical of claim 1, ~~Claims 1 or 2~~ wherein said docosahexaenoic acid is provided as an algae or fraction thereof.
4. (Currently Amended) The nutraceutical of Claim 3 wherein said algae is ~~selected from the group consisting of:~~ *Crypthecodinium; Phaedactylum; Isochrysis; Schizochytrium; Thauستochytrium;* or *Ulkenia*.
5. (Currently Amended) The nutraceutical of claim 1, ~~Claims 1 or 2~~ wherein said docosahexaenoic acid is provided as a fish oil or fraction thereof.
6. (Currently Amended) The nutraceutical of claim 1, ~~according to any of Claims 1-5~~ wherein said carotenoid is ~~selected from the group consisting of~~ astaxanthin, zeaxanthin, lycopene, lutein, or carotene.
7. (Currently Amended) The nutraceutical of claim 1, ~~according to any of Claims 1-6~~ wherein said carotenoid is from a microbial source.
8. (Original) The nutraceutical according to Claim 7 wherein said microbe is *Haematococcus* or *Pfaffia*.
9. (Cancelled).
10. (Cancelled).
11. (Cancelled).

12. (Currently Amended) The nutraceutical of claim 1, ~~according to any of Claims 1-11~~ wherein said ~~composition~~ nutraceutical further comprises yeast.
13. (Currently Amended) The nutraceutical of claim 1, ~~according to any of Claims 1-12~~ wherein said ~~composition~~ nutraceutical further comprises an anti-inflammatory agent.
14. (Currently Amended) The nutraceutical according to Claim 13 wherein said ~~further~~ anti-inflammatory agent is ~~selected from the group consisting of:~~ vitamin C, vitamin E, lycopene,  $\beta$ -carotene, lutein, organic selenium,  $\alpha$ -lipoic acid, methylsulfonylmethane, glutathione, taurine, glycine, glutamine, arginine, cysteine, methionine, S-adenosylmethionine, nucleotides, nucleic acids, curcumin, green tea extract, green-lipped mussel extract (*Perna canaliculus*), or a standardised herbal extracts ~~such as *Phyllanthus amarus*, *Fructus Schisandra*, Chamomile, Blackcurrant leaf, Devil's claw.~~
15. (Currently Amended) The nutraceutical of claim 1, ~~according to any of Claims 1-14~~ wherein said inflammatory condition is an ~~selected from the group consisting of:~~ inflammatory joint diseases ~~e.g. rheumatoid arthritis, osteoarthritis, polyarthritis and gout;~~ a chronic inflammatory connective tissue diseases ~~e.g. lupus erythematosus, scleroderma, Sjorgen's syndrome, poly and dermatomyositis, vasculitis;~~ a mixed connective tissue disease (MCTD); ~~e.g. tendonitis, synovitis, bacterial endocarditis, osteomyelitis and psoriasis;~~ a chronic inflammatory lung diseases ~~e.g. chronic respiratory disease, pneumonia, fibrosing alveolitis, ehronic bronchitis, chronic obstructive pulmonary disease (COPD), bronchiectasis, emphysema, silicosis and other pneumoconiosis and tuberculosis;~~ chronic inflammatory bowel and gastro-intestinal tract inflammatory diseases ~~e.g. ulcerative colitis and Crohn's disease;~~ a chronic neural inflammatory diseases ~~e.g. chronic inflammatory demyelinating polyradiculoneuropathy, chronic inflammatory demyelinating polyneuropathy, multiple sclerosis, Guillan-Barre Syndrome and myasthenia gravis;~~ and including, mastitis, laminitis, laryngitis, chronic cholecystitis, Hashimoto's thyroiditis, inflammatory breast disease, or and chronic inflammation.

16. (Original) A composition comprising an algal source of docosahexaenoic acid and a microbial source of astaxanthin.
17. (Currently Amended) The composition of Claim 16 wherein the algae is ~~selected from the group consisting of: *Cryptocodinium*; *Phaedactylum*; *Isochrysis*; *Schizochytrium*; *Thaustochytrium*; or *Ulkenia*,~~
18. (Currently Amended) The composition of Claim 16 ~~or 17~~ wherein the microbial source of astaxanthin is *Haematococcus* or *Pfaffia*.
19. (Currently Amended) The composition of ~~Claims 16-18~~ claim 16 further comprising inactivated brewers yeast.
20. (Currently Amended) The composition of ~~any of claims 16-19~~ claim 16 further comprising an anti-inflammatory agent selected from the group consisting of: vitamin C, vitamin E, lycopene,  $\beta$ -carotene, lutein, organic selenium,  $\alpha$ -lipoic acid, methylsulfonylmethane, glutathione, taurine, glycine, glutamine, arginine, cysteine, methionine, S-adenosylmethionine, nucleotides, nucleic acids, curcumin, green tea extract, green-lipped mussel extract (*Perna canaliculus*), ~~or and a standardised herbal extracts such as *Phyllanthus amarus*, *Fructus Schisandra*, *Chamomile*, *Blackcurrant leaf*, *Devil's claw*.~~
21. (Currently Amended) A feed comprising the nutraceutical of claim 1 ~~according to any of Claims 1-15.~~
22. (Currently Amended) A feed comprising the nutraceutical of claim 1 ~~according to any of Claims 1-15~~ and grass meal.
23. (Original) A method of treating an animal suffering from an inflammatory condition or disease comprising administering to said animal an effective amount of at least one long chain polyunsaturated fatty acid and at least one carotenoid.
24. (Currently Amended) A The method according to Claim 23 wherein said long chain fatty acid is a free fatty acid, or an ester thereof.

25. (Currently Amended) A The method of claim 24, ~~according to Claim 23 or 24~~ wherein said long chain fatty acid is ~~selected from the group consisting of:~~ a triglyceride, diglyceride, monoglyceride, phospholipids[[s]], glycolipid, sphingolipid or sulpholipid.
26. (Currently Amended) A The method of claim 24, ~~according to any of Claims 23-25~~ wherein said long chain fatty acid is docosahexanoic acid.
27. (Currently Amended) A The method of claim 23, ~~according to any of Claims 23-26~~ wherein said carotenoid is ~~selected from the group consisting of:~~ astaxanthin, zeaxanthin, lycopene, lutein, or carotene.
28. (Currently Amended) A The method of claim 23, ~~according to any of Claims 23-27~~ wherein said animal is administered a further anti-inflammatory agent.
29. (Currently Amended) A The method of claim 23, ~~according to any of Claims 23-28~~ wherein said inflammatory disease or condition is ~~selected from the group consisting of:~~ an inflammatory joint diseases ~~e.g. rheumatoid arthritis, osteoarthritis, polyarthritis and gout;~~ a chronic inflammatory connective tissue diseases ~~e.g. lupus erythematosus, scleroderma, Sjorgen's syndrome, poly and dermatomyositis, vasculitis;~~ a mixed connective tissue disease (MCTD), ~~e.g. tendonitis, synovitis, bacterial endocarditis, osteomyelitis and psoriasis;~~ a chronic inflammatory lung diseases ~~e.g. chronic respiratory disease, pneumonia, fibrosing alveolitis, chronic bronchitis, chronic obstructive pulmonary disease (COPD), bronchiectasis, emphysema, silicosis and other pneumoconiosis and tuberculosis;~~ chronic inflammatory bowel and gastro-intestinal tract inflammatory diseases ~~e.g. ulcerative colitis and Crohn's disease;~~ a chronic neural inflammatory diseases ~~e.g. chronic inflammatory demyelinating polyradiculoneuropathy, chronic inflammatory demyelinating polyneuropathy, multiple sclerosis, Guillan-Barre Syndrome and myasthenia gravis;~~ and including, mastitis, laminitis, laryngitis, chronic cholecystitis, Hashimoto's thyroiditis, inflammatory breast disease; chronic inflammation (~~e.g., caused by an implanted foreign body in a wound~~); and acute inflammatory tissue damage due to muscle damage after eccentric exercise (~~e.g., delayed onset muscle soreness—DOMS~~).

30. (Currently Amended) A The method of claim 23, according to any of Claims 23-29 wherein said animal is a selected from the group consisting of horse; dog; cat ; cow; sheep; goat; camel, llama, mink; pig; hamster; mouse; rabbit; pot bellied pig; rat, gerbil, or guinea pig.
31. (Currently Amended) A The method of claim 23, according to any of Claims 23-29 wherein said animal is a human.
32. (New) The nutraceutical of claim 14, wherein the standardised herbal extract is *Phyllanthus amarus*, *Fructus Schisandra* , Chamomile, Blackcurrant leaf, or Devil's claw,
33. (New) The composition of claim 20, wherein the standardised herbal extract is *Phyllanthus amarus*, *Fructus Schisandra* , Chamomile, Blackcurrant leaf, or Devil's claw,
34. (New) The method of claim 26, wherein the docosahexaenoic acid is provided to the animal at a dose of between 0.05 and 500 mg/kg body weight and said carotenoid is provided at a dose of between 0.5 and 5,000 ug/kg body weight.
35. (New) The method of claim 26, wherein said docosahexaenoic acid is provided to the animal at a dose of between 0.5 and 15 mg/kg body weight and said carotenoid is provided at a dose of between 1.5 and 150 ug/kg body weight.
36. (New) The method of claim 26, wherein said docosahexaenoic acid is provided to the animal at a dose of between 1 and 3 mg/kg body weight and said carotenoid is provided at a dose of between 7.5 and 22.5 ug/kg body weight.
37. (New) The nutraceutical of claim 15, wherein said inflammatory joint disease is rheumatoid arthritis, osteoarthritis, polyarthritis or gout; said chronic inflammatory connective tissue disease is lupus erythematosus, scleroderma, Sjorgen's syndrome, poly- and dermatomyositis, or vasculitis; said mixed connective tissue disease (MCTD) is tendonitis, synovitis, bacterial endocarditis, osteomyelitis or psoriasis; said chronic inflammatory lung disease is chronic

respiratory disease, pneumonia, fibrosing alveolitis, chronic bronchitis, chronic obstructive pulmonary disease (COPD), bronchiectasis, emphysema, silicosis and other pneumoconiosis, or tuberculosis; said chronic inflammatory bowel and gastro-intestinal tract inflammatory diseases are ulcerative colitis or Crohn's disease; and said chronic neural inflammatory disease is chronic inflammatory demyelinating polyradiculoneuropathy, chronic inflammatory demyelinating polyneuropathy, multiple sclerosis, Guillan-Barre Syndrome or myasthenia gravis.

38. (new) The method of claim 29, wherein said inflammatory joint disease is rheumatoid arthritis, osteoarthritis, polyarthritis or gout; said chronic inflammatory connective tissue disease is lupus erythematosus, scleroderma, Sjorgen's syndrome, poly- and dermatomyositis, or vasculitis; said mixed connective tissue disease (MCTD) is tendonitis, synovitis, bacterial endocarditis, osteomyelitis or psoriasis; said chronic inflammatory lung disease is chronic respiratory disease, pneumonia, fibrosing alveolitis, chronic bronchitis, chronic obstructive pulmonary disease (COPD), bronchiectasis, emphysema, silicosis and other pneumoconiosis, or tuberculosis; said chronic inflammatory bowel and gastro-intestinal tract inflammatory diseases is ulcerative colitis or Crohn's disease; said chronic neural inflammatory disease is chronic inflammatory demyelinating polyradiculoneuropathy, chronic inflammatory demyelinating polyneuropathy, multiple sclerosis, Guillan-Barre Syndrome or myasthenia gravis; said chronic inflammation is caused by an implanted foreign body in a wound; and said acute inflammatory tissue damage due to muscle damage after eccentric exercise is delayed onset muscle soreness.